



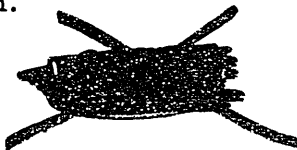
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ADVANCED RESEARCH PROJECTS AGENCY
WASHINGTON 25, D. C.

ARPA Order No. 38 -59

November 5, 1958 Date

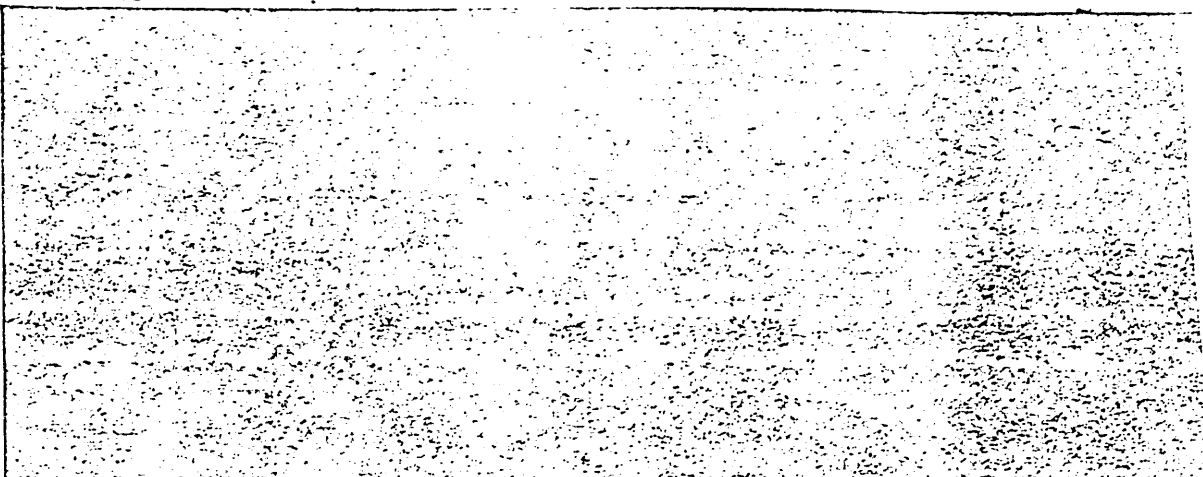
TO: Commander
Air Research and Development Command
Andrews Air Force Base
Washington 25, D. C.

1. Pursuant to the provisions of DoD Directive 5105.15, dated February 7, 1958, you are requested to proceed at once on behalf of the Advanced Research Projects Agency with the project specified below. Additional details and directives may be issued by ARPA from time to time and will become a part of this Order when so specified.
2. Study and development begun as Subsystem G of Weapon System 117L are to be continued, in accordance with this outline, as an independent project, to result in an orbitally flight tested Missile Defense Alarm Satellite (MIDAS) (U). Tasks to be carried out are:
 - a. Prepare for approval by ARPA a definitive statement of work remaining to be done and costs to be incurred on development, ground testing, and limited orbital flight testing of a Missile Defense Alarm Satellite, including necessary communication capability, and including studies aimed at defining a development program for a more advanced capability for missile defense alarm. The project definitively stated should be completed by April 30, 1960, and the work statement should indicate intended dates of reaching important milestones, against which progress of the projects can be monitored, and estimates for work to be performed (1) by ARDC, (2) by contract, and (3) at other Government facilities. The statement of the program to be prepared should be submitted to ARPA by December 15, 1958.
 - b. Continue fabrication of two completely functioning infrared-sensing satellite payloads. Plan completion in fully functioning form of an additional payload, initially only a thermal simulacrum.



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c. Initiate study and development of satellite/ground communication equipment specifically needed for initial flight tests.



f. Initiate preliminary design study of infrared trackers and precise direction readout devices, leading toward an integrated missile-defense alarm payload of more advanced capabilities.

g. Plan further orbital experiments, to use vehicles and payloads more advanced than those of the initial flight tests.

h. Examine the possibility of designing simple experiments and building simple payloads to make use of possible excess load capacity on missile or satellite flights of other programs, for obtaining additional data of value to the MIDAS project.

i. Continue, for the present, experimental program to secure physical data on infrared phenomena, as needed for effective engineering development of the alarm satellite. Process results of these experiments, and of other measurement programs, to contribute most effectively to the MIDAS project.

3. This Order makes available \$750,000 under appropriation and account symbol "97X0113.002 Salaries and Expenses, Advanced Research Projects Agency, Office of the Secretary of Defense" for obligation by the Air Research and Development Command on behalf of the Advanced Research Projects Agency only for purposes necessary to accomplish the work specified herein. These funds are for the period November 1, 1958, to January 31, 1959, and immediately

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available for direct obligation and for use in reimbursing the Air Research and Development Command for costs incurred under this Order. The funds made available are not for the construction of facilities.

4. The costs chargeable to this project (formerly Subsystem G) since July 1, 1958, and charged to ARPA Order No. 9, shall be identified and transferred to this Order. Funds shall be adjusted by ARPA as appropriate.

5. The Director, Advanced Research Projects Agency, will provide policy and technical guidance either directly or through designated representatives. The Air Research and Development Command will be responsible for arranging for the detailed technical directions necessary to accomplish the specified objectives and to comply with ARPA policy and technical guidance. This general relationship may be specified in greater detail by amendment to this Order if such action is necessary.

6. The Director, Advanced Research Projects Agency, will be kept informed of the status of work assigned under this Order by a monthly progress report and a semi-annual technical report to be prepared and submitted in accordance with procedures outlined in Attachment No. 1. These reports represent ARPA's total foreseeable requirement for recurring reports based on this Order.

7. The utilization of equipment and materials procured in connection with this project for other projects is subject to the direction of ARPA. Notwithstanding, final disposition of such equipment and materials shall be made in accordance with standard procedures. Any technical and scientific information relating to work under this Order which may be published from time to time shall give appropriate credit to the ARPA project. No scientific and technical progress and status reports on ARPA's projects or final completion reports prepared specifically at ARPA's request shall be made available to other agencies or individuals without approval of ARPA.

8. ARDC shall be responsible for preserving the security of this project in accordance with the security classification assigned and the security regulations and procedures of the Department of the Air Force.

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9. Notwithstanding any other provisions of this Order, ARDC shall not be bound to take any action in connection with the performance of this work that would cause the amount for which the Government will be obligated hereunder to exceed the funds made available, and the obligations to ARDC to proceed with the performance of this work shall be limited accordingly. ARDC shall be responsible for assuring that all commitments, obligations and expenditures of the funds made available are made in accordance with the statutes and regulations governing such matters, provided that whenever such regulations require approval of higher authority such approvals will be obtained from or through the Director, ARPA, or his designated representative.


Roy W. Johnson
Director

Attachment:
No. 1

cc: Secretary of the Air Force

PREPARATION OF REPORTS

I. Monthly Progress Report.

This report will be submitted in two parts, a Narrative Section and a Milestone Progress Section.

Narrative Section. A letter report will be prepared each month by the addressee of the above numbered ARPA Order, giving a narrative account of work performed under the Order. The initial report will cover the first calendar month following the date of this Order. Subsequent reports will cover work performed during each month thereafter. The report will be submitted in quadruplicate to the Director, Advanced Research Projects Agency, and is due within 10 days following the close of the month reported. The ARPA Order number and subject of the project should be stated in the heading of each report.

The report will be in letter form and generally not exceed three pages in length. It will present a narrative summary of work performed, including technical status, major accomplishments, problems encountered, future plans, and any action required by ARPA. The initial report should include an introductory preface outlining the background, objectives, and assignment of responsibility for the project. All reports should include photographs and illustrations as appropriate. In addition, an autopsitive negative (kodalith master) for each illustration should be included, where practical, for use in presentations or reproductions.

Milestone Progress Section. Instructions for preparation of this section, which requires use of a standard format in reporting actual progress against planned progress in accomplishing major milestones, will be issued at a later date.

II. Semi-Annual Technical Summary Report.

A technical summary report will be prepared semi-annually for periods ending June 30 and December 31 of each year. The report will present a concise and factual discussion of technical findings and accomplishments during the quarter. The initial technical summary report will cover a period of at least 3 months subsequent to issuance of a contract or work order; otherwise, the report should be delayed until close of the next 6-month period. The report will be submitted in quadruplicate to the Director, Advanced Research Projects Agency, and is due within 30 days following the close of the report period. Additional distribution may be specified by ARPA at a future date. The ARPA Order number and subject of the project should be stated in the heading of each report.